

IN THE CLAIMS:

Claims 1 - 20 (Canceled)

21. (New) A solid state current distribution system for DC voltages, the system comprising:

an electronic solid state switch for current switching from an input circuit powered by a voltage source to an output circuit connected to a load, the electronic solid state switch having output terminals;

a first copper support connected to the electronic switch and connectable to the input circuit;

a printed circuit board connected to, and for control of, the electronic solid state switch; and

a second copper support connected to said output terminals and to be connected to the output circuit.

22. (New) A solid state current distribution system according to claim 21, wherein the electronic solid state switch is soldered to the first copper support.

23. (New) A solid state current distribution system according to claim 21, wherein the output terminals are soldered to the second copper support by means of U shaped leads.

24. (New) A solid state current distribution system according to claim 21, wherein the printed circuit board includes an electronic circuit with a first selector to be set to program a range of current and a second selector to be set to program a time delay to be used if loads have an inductive component.

25. (New) A solid state current distribution system according to claim 21, further comprising a reset connected to the electronic solid state switch for a manual resetting of the system.

26. (New) A solid state current distribution system according to claim 21, wherein the printed circuit board includes a microcontroller and a memory programmed for system management and recording parameters.

27. (New) A solid state current distribution system according to claim 21, configured as autonomous module.

28. (New) A solid state current distribution system according to claim 26, configured as a module connectable in a parallel mode with one or more similar modules.

29. (New) A solid state current distribution system according to claim 27, wherein the module is programmable for different ranges of current.

30. (New) A solid state current distribution system according to claim 21, wherein the printed circuit board is provided with a connector for interfacing with an external computer to control and remotely monitor the current distribution system.

31. (New) A solid state current distribution system according to claim 21, further comprising a heat dissipator associated with the solid state switch.

32. (New) A solid state current distribution system according to claim 21, wherein the input circuit includes a copper support bar, the copper support bar and the first and second copper supports are shaped and dimensioned as heat dissipators.

33. (New) A solid state current distribution system according to claim 21, to be used in electrical installations for naval or industrial applications.

34. (New) A solid state current distribution system according to claim 22, wherein the output terminals are soldered to the second copper support by means of U shaped leads.

35. (New) A solid state current distribution system according to claim 22, wherein the printed circuit board includes an electronic circuit with a first selector to be set to program a range of current and a second selector to be set to program a time delay to be used if loads have an inductive component.

36. (New) A solid state current distribution system according to claim 22, wherein the printed circuit board includes a micro-controller and a memory programmed for system management and recording parameters.

37. (New) A solid state current distribution system according to claim 28, wherein the module is programmable for different ranges of current.

38. (New) A solid state current distribution system according to claim 22, wherein the printed circuit board is provided with a connector for interfacing with an external computer to control and remotely monitor the current distribution system.

39. (New) A solid state current distribution system for DC voltages, the system comprising:

an electronic solid state switch including an input and an output, said electronic solid state switch switching current from said input to said output;

5 a first copper support connected to said input of said electronic solid state switch;

a printed circuit board connected to said electronic solid state switch for control of said electronic solid state switch;

an output terminal connected to said output of said electronic solid state switch;

a second copper support connected to said output terminals.

40. (New) A solid state current distribution system according to claim 39, wherein:
said printed circuit board includes a micro-controller and a memory programmed for
system management and recording parameters.

41. (New) A solid state current distribution system according to claim 39, wherein:
said printed circuit board includes a connector for interfacing with an external computer
to control and remotely monitor the current distribution system.